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Chapter 5

Scale

Derangements of Scale

TIMOTHY CLARK

*When we observe the environment, we necessarily
do so only on a limited range of scales; therefore our
perception of events provides us with only a low-
dimensional slice through a high-dimensional cake*

– Simon A. Levin

Introduction: Scale Effects

You are lost in a small town, late for a vital appointment somewhere in its streets. You stop a friendly-looking stranger and ask the way. Generously, he offers to give you a small map which he happens to have in his briefcase. The whole town is there, he says. You thank him and walk on, opening the map to pinpoint a route. It turns out to be a map of the whole earth.

The wrong scale.

A scale (from the Latin *scala* for ladder, step or stairs) usually enables a calibrated and useful extrapolation between dimensions of space or time. Thus a “cartographic scale” describes the ratio of distance on a map to real distances on the earth’s surface. To move from a large to small scale or vice versa implies a calculable shift of resolution on the same area or features, a smooth zooming out or in. With climate change, however, we have a map, its scale includes the whole earth but when it comes to relating the threat to daily questions of politics, ethics or specific interpretations of history, culture, literature, etc., the map is often almost mock-

ingly useless. Policies and concepts relating to climate change invariably seem undermined or even derided by considerations of scale: a campaign for environmental reform in one country may be already effectively negated by the lack of such measures on the other side of the world. A long fought-for nature reserve, designed to protect a rare ecosystem, becomes, zooming out, a different place. Even the climatology works on a less than helpful scale: “Paradoxically, it is simpler to predict what will happen to the planet, a closed system, than to make forecasts for specific regions” (Litfin 137).

Cartographic scale is itself an inadequate concept here. Non-cartographic concepts of scale are not a smooth zooming in and out but involve jumps and discontinuities with sometimes incalculable “*scale effects*.” For instance:

In the engineering sciences, scale effects are those that result from size differences between a model and the real system. Even though a miniature model of a building made of wood is structurally sound, it is not necessarily appropriate to infer that the same process maintaining structural stability could hold for a full-size building made of wood. (Jenerette and Wu 104)

To give another instance, a map of the whole earth, at a “small” scale in cartographic terms, is at an enormous scale ecologically, one at which other non-linear scale effects become decisive and sometimes incalculable. Garrett Hardin writes:

Many stupid actions taken by society could be avoided if more people were acutely aware of scale effects. Whenever the scale is shifted upward, one should always be alert for possible contradictions of the conventional wisdom that served so well when the unit was smaller.... Failure of the electorate to appreciate scale effects can put the survival of a democratic nation in jeopardy. (52)

Some thinkers less controversial than Hardin draw on complexity theory to suggest the necessary emergence of scale effects with merely the increasing complexity of globalizing civilization: “once a society develops beyond a certain level of complexity it becomes increasingly fragile.

Eventually it reaches a point at which even a relatively minor disturbance can bring everything crashing down” (MacKenzie 33). For others, the environmental crisis is in part caused by the effects of conflicting scales in the government of human affairs. Jim Dator writes:

Environmental, economic, technological and health factors are global, but our governance systems are still based on the nation state, while our economic system (‘free market’ capitalism) and many national political systems (interest group ‘democracy’) remain profoundly individualistic in input, albeit tragically collective in output (215–6).

Scale effects in relation to climate change are confusing because they take the easy, daily equations of moral and political accounting and drop into them both a zero and an infinity: the greater the number of people engaged in modern forms of consumption then the less the relative influence or responsibility of each but the worse the cumulative impact of their insignificance. As a result of scale effects what is self-evident or rational at one scale may well be destructive or unjust at another. Hence, progressive social and economic policies designed to disseminate Western levels of prosperity may even resemble, on another scale, an insane plan to destroy the biosphere. Yet, for any individual household, motorist, etc., a scale effect in their actions is invisible. It is not present in any phenomenon in itself (no eidetic reduction will flush it out), but only in the contingency of how many other such phenomena there are, have been and will be, at even vast distances in space or time. Human agency becomes, as it were, displaced from within by its own act, a kind of demonic iterability.

The argument of this paper is that dominant modes of literary and cultural criticism are blind to scale effects in ways that now need to be addressed.

Derangements of Scale

One symptom of a now widespread crisis of scale is a derangement of linguistic and intellectual proportion in the way people often talk about the environment, a breakdown of “decorum” in the strict sense. Thus a sen-

tence about the possible collapse of civilization can end, no less solemnly, with the injunction never to fill the kettle more than necessary when making tea. A poster in many workplaces depicts the whole earth as giant thermostat dial, with the absurd but intelligible caption "You control climate change." A motorist buying a slightly less destructive make of car is now "saving the planet."

These deranged jumps in scale and fantasies of agency may recall rhetoric associated with the atomic bomb in the 1950s and after. Maurice Blanchot argued then that talk of humanity having power over the whole earth, or being able to "destroy itself," was deeply misleading. "Humanity" is not some grand mega-subject or unitary agent in the sense this trope implies. In practice such destruction would certainly not be some sort of consciously performed act of self-harm, "humanity destroying itself." It would be as arbitrary as was "the turtle that fell from the sky" and crushed the head of Aeschylus (Blanchot 106).

The almost nonsensical rhetoric of environmental slogans makes Blanchot's point even more forcefully. Received concepts of agency, rationality and responsibility are being strained or even begin to fall apart in a bewildering generalizing of the political that can make even filling a kettle as public an act as voting. The very notion of a "carbon footprint" alters the distinctions of public and private built into the foundations of the modern liberal state. Normally, demands in a political context to face the future take the form of some rousing call to regained authenticity, whether personal, cultural or national, and they reinforce given norms of morality or responsibility, with an enhanced sense of determination and purpose. With climate change this is not the case. Here a barely calculable nonhuman agency brings about a general but unfocused sense of delegitimation and uncertainty, a confusion of previously clear arenas of action or concepts of equity; boundaries between the scientific and the political become newly uncertain, the distinction between the state and civil society less clear, and once normal procedures and modes of understanding begin to resemble dubious modes of political, ethical and intellectual containment. Even a great deal of environmental criticism, modeling itself on kinds of progressive oppositional politics and trying (like Murray Bookchin's "social ecology") to explain environmental degradation by reference solely to human-to-human hierarchies and oppressions

can look like an evasion of the need to accord to the nonhuman a disconcerting agency of its own.

The environmental crisis also questions given boundaries between intellectual disciplines. The daily news confirms repeatedly the impossibility of reducing many environmental issues to any *one* coherent problem, dysfunction, or injustice. Overpopulation and atmospheric pollution, for instance, form social, moral, political, medical, technical, ethical and “animal rights” issues, all at once. If that tired term “the environment” has often seemed too vague—for it means, ultimately, “everything”—yet the difficulty of conceptualizing a politics of climate change may be precisely that of having to think “everything at once”. The overall force is of an implosion of scales, implicating seemingly trivial or small actions with enormous stakes while intellectual boundaries and lines of demarcation fold in upon each other. The inundation of received intellectual boundaries and the horror of many probable future scenarios has the deranging effect, for instance, of making deeply unsure which of the following two statements is finally the more responsible—(1) “climate change is now acknowledged as a legitimate and serious concern and the government will continue to support measures to improve the fuel efficiency of motor vehicles” or (2) “the only defensible relationship to have with a car is with a well aimed brick”?¹

Contra “Liberal Criticism”

How then can a literary or cultural critic engage with the sudden sense that most given thought about literature and culture has been taking place on the wrong scale?

The most controversial political effect of climate change may be its challenge to basic dominant assumptions about the nature and seeming self-evident value of “democracy” as the most enlightened way to conduct human affairs. David Shearman and Joseph Wayne Smith write: “colossal environmental problems, both existing and impending, have been accelerated by the freedoms and corruption of democracy and are unlikely to be solved by this system of governance” (15). The decisive target here is “liberal democracy” and the now dominant liberal tradition in political thought, i.e. the tradition that combines institutions of private

property, market-based economics, individualistic-rights-based notions of personhood and the conception of the state as “existing to secure the freedom of individuals on a formally egalitarian basis” (Brown, *Edgework* 39). The liberal political tradition looking back to Thomas Hobbes and John Locke sees politics as essentially a matter of compacts between individuals for the unmolested use of individual property and exploitation of natural resources. Such concepts of right seem at first merely neutral: the rights that apply to a hundred people, or to a hundred million, could surely also apply to billions? Some questions about scale, however, emerge when it is remembered that the founding conceptions of the liberal tradition emerged in the seventeenth and eighteenth centuries “in low-population-density and low-technology societies, with seemingly unlimited access to land and other resources,” in a world, that is, that has now been consumed (Jamieson 148). On top of this, “[Locke] takes for granted that there will be enough, that the goodness of things provides enough so that taking by one or a group does not deprive others” (Ross 57). Structurally committed to a process of continuous economic growth, modern Western society effectively projected as its material condition an ever-expandable frontier of new land or resources. This impossible demand or assumption, long disguised by the free gift of fossil fuels, has now become visible and problematic. What Hans Jonas writes of “all traditional ethics” applies here: it “reckoned only with noncumulative behaviour” (7).

Liberal notions of extending the status of the rights-bearing individual to more and more people are caught up in a complex and bewildering economy of violence. Climate change disrupts the scale at which one must think, skews categories of internal and external and resists inherited closed economies of accounting or explanation in a way even Jacques Derrida seems not to have suspected. Referring to Derrida’s well-known account in *Specters of Marx* (1993) of the “10 plagues” (81–3) held to be threatening the world, Tom Cohen notes the puzzling absence of any reference to environmental crisis, arguably the most deadly of all:

[Derrida’s] manoeuvre looks weak today, all ten being fairly standard and all human-to-human political miseries—from worklessness to weak international law. Today, as we “know,” the entire gameboard has been invisibly haunted by its own

drive to auto-erase, or auto-eviscerate its non-anthropocentric premises. (qtd. in Wood 287)

True, Derrida writes of incalculable responsibility and the conceptual and physical destabilization of borders, of national frontiers and the “at home.” His *On Hospitality* (2000) argues how the supposedly inviolable interiority of the home is already de-constituted, turned inside-out, by its multiple embeddings in public space, the state, the telephone line, monitored emails, etc., yet there is residual idealism in Derrida’s exclusive attention to systems of law and communication (61). The focus on the moment of decision in individual consciousness and its pathos (its ordeal of undecidability, etc.) seems narrow and inadequate in a context in which things have now become overwhelmingly more political than people. Nothing in his work seems to allow for a situation in which it is not irrational to connect a patio heater in London immediately with the slow inundation of Tuvalu in the Pacific. Thus *On Hospitality* mentions TV, email and internet but not the central heating system, cooking appliances, washing machine or car (or, for that matter, the institution of private property itself, despite its crucial connection to Derrida’s topic of personal sovereignty). In effect, “All reality is politics, but not all politics is human” (Harman 89).

Wendy Brown argues that Derrida’s “treatment of freedom reveals the hold of liberalism on his formulations of democracy,” (“Sovereign Hesitations” 127) that his arguments still work within an essentially liberal conception of politics as devising systems to enable the space of individuals’ seeming freedom to live as they choose, the challenge being to extend such politics beyond current borders and even beyond an exclusively human reference.² Reconfiguring a notion of the subject as openness to the other etc. instead of an autonomous self-presence, and attention to aporias of freedom/equality and conditional and unconditional hospitality, do not alter the basic terms of Derrida’s commitment to a liberal progressive tradition whose assumptions of scale are here at issue. In support of Brown’s point one can argue that a seeming blindness to nonhuman agency and to scale effects tends to preserve the political in *On Hospitality* as a factitiously separate sphere. Yet environmental issues enact a bewildering generalization of the political that makes Derrida’s focus on human norms, institutions, and decisions look like a kind of containment.

His conception of the moment of decision as a negotiation with the undecidable is simultaneously both trivialized and magnified by scale effects in relation to such minutiae as turning a light on or deciding to buy a freezer. The later Derrida's frontier questions of conditional or unconditional hospitality can seem foreclosed in scale, two-dimensional, for they ignore that ubiquitous border already contiguous with all other countries at the same time, a shared atmosphere. To live the hourly trivia of an affluent lifestyle in France is *already* to lurk as a destructive interloper in the living space of a farmer on the massive floodplains of Bangladesh.

A nonhuman politics also raises questions about the dominant, liberal/progressive cultural politics of much mainstream professional literary criticism. The frequent method now is to read all issues as forms of cultural politics within an understanding of the text analogous to way the liberal tradition sees civic society generally, viz. as an arena for the contestation of individual or collective interests, rights or identity claims. For example, Group A is seen to achieve its self-celebratory image through its (implicit) denigration of Group B, while Group C is seen as itself "marginalized" by the way Group B always seems to identify it with Group A, instead of being a distinct set with its own claims...and so on.³ Yet each, at the same time, is staking its own rights to air, water, space and material resources and to focus solely on the rights of the individual person or group elides the issue of the violence continually and problematically being waged against the earth itself, whose own agency is both taken for granted and disregarded. It is as if critics were still writing on a flat and passive earth of indefinite extension, not a round, active one whose furthest distance comes from behind to tap you uncomfortably on the shoulder. Modes of thinking and practice that may once have seemed justified, internally coherent, self-evident or progressive now need to be reassessed in terms of hidden exclusions, disguised costs, or as offering a merely imaginary or temporary closure. How this will work out in practice, however, is harder to predict—at least beyond the trivially obvious ("Well, I always thought Kerouac's *On the Road* was an irresponsible book, but now this!").

Perhaps then the most trenchant environmental and postcolonial criticism in relation to climate change would be one which took up the more meta-critical role of examining assumptions of scale in the individualist

rhetoric of liberalism that still pervades a large body of given cultural and literary criticism. An ethic attending such work would also breach current notions of decorum, redrawing the seeming boundaries of privacy whereby, say, a critic's professed views on history, religion, colonialism or ethics are all seen to belong in the realm of "public" controversy, seminars, papers and conferences while the resources sequestered to that person's sole use remain a supposedly "private" matter, with a high salary and its attendant life-style still regarded, if at all, as a matter of prestige.

Reading Raymond Carver's "Elephant" on a scale of six centuries

In what ways are inherited and currently dominant modes of reading in literary and cultural criticism blind to questions of scale? The issue can be tested through a practical reading experiment. How would it be to read and reread the same text through a series of increasingly broad spatial and temporal scales, one after the other, paying particular attention to the strain this puts on given critical assumptions and currently dominant modes of reading?

Let us turn here to a specific literary example, Raymond Carver's late short story, "Elephant" (1988). This text is a comic monologue consisting of the complaints and then gradual acceptance of a male blue-collar worker who is continually being pestered for money by hard-pressed relatives in other parts of the country. Most of "Elephant" happens between domestic interiors linked by telephone. The narrator's recently unemployed brother, a thousand miles away in California, requiring immediate help to pay the mortgage on his house, seems later to be able to forgo more borrowing because his wife might sell some land in her family but finally comes asking for money once more. He has already had to sell their second car and pawn the TV. The narrator's daughter has two children and is married to:

A swine who won't even *look* for work, a guy who couldn't hold a job if they handed him one. The time or two he did find something, he overslept, or his car broke down on the way to work, or he'd just be let go, no explanation and that was that. (77)

The narrator's aged mother, "poor and greedy," (74) relies on the support of both her sons to maintain her independent lifestyle amid signs of failing health. The narrator's son demands money to enable him to emigrate and a divorced wife has to be paid alimony. Struggling with his resentment as he writes all the cheques, the narrator reaches a turning point with two dreams, one of them being about how his father used to carry him on his shoulder when he was a child, and he would feel safe, stretch out his arms and fantasize that he was riding an elephant. The next morning, giving a kind of private blessing to all his relatives despite their demands, he decides to walk rather than drive to work, leaving his house unlocked. Walking along the road, he is stretching out his arms as in his dream of childhood when a workmate called George stops to pick him up. George has a cigar and has just borrowed money to improve his car. Together they test it for speed:

"Go," I said. "What are you waiting for, George." And that's when we really flew. Wind howled outside the windows. He had it floored, and we were going flat out. We streaked down that road in his big unpaid-for car. (90)

With the new questions posed by climate change in mind, what kinds of readings emerge of such a text?

Firstly, perhaps, that if "Capitalism must be regarded as an economy of unpaid costs," (K. William Kapp, qtd. in Foster 37) then "Elephant" could easily read as a kind of environmental allegory, as a narrative of a chain of unpaid debt and unearned support extending itself into the final image of the large unpaid for car. This relatively obvious first reading, however, can be deepened by considerations of scale.

Any broadly mimetic interpretation of a text, mapping it onto different if hopefully illuminating terms, always assumes a physical and temporal scale of some sort. It is a precondition of any such mapping, though almost never explicit in the interpretation. The scale in which one reads a text drastically alters the kinds of significance attached to elements of it, but, as we will see, it cannot itself give criteria for judgment.

Three scales can be used. Firstly, we could read the text on a (critically naïve) personal scale that takes into account only the narrator's immediate circle of family and acquaintances over a time scale of several years.

At this scale there is a certain humanist coziness about the text, as if the Carver story were already a commercial screenplay. Family loyalty wins out against misfortune; love and forgiveness prevail in a tale of minor but genuine domestic heroism. The reading could refer to Carver's defense of the short story as throwing "some light on what it is that makes and keeps us, often against great odds, recognizably human" (Nesset 104). In this respect "Elephant" would even come close to being a kind of Carver schmaltz.

A second scale is that almost always assumed in literary criticism. Spatially, it is that of a national culture and its inhabitants, with a time frame of perhaps a few decades, a "historical period" of some kind. Almost all criticism of Carver is situated at this scale, placing his work in the cultural context of the late twentieth century United States (or sometimes, on a broader scale, that of the modern short story after Edgar Allan Poe). Kirk Nesset, writing in 1995, is representative: "Carver's figures dramatize and indirectly comment upon the problems besetting American culture, particularly lower middle-class culture, today" (7). Other topics prominent in discussions of Carver are broadly located at this scale, such as unemployment and consumer culture as they affect personal relationships, the ideals and realities of American domesticity, that society's materialism, and its concepts of gender, especially masculinity. This scale enables an interpretation of the final scene of "Elephant" as an affirmative but temporary moment of escape from the denigrations and frustrations of American consumer capitalism, focused on the private car as an image of individual freedom and mobility.

The third, hypothetical scale is, of course, the difficult one. It could be, spatially, that of the whole earth and its inhabitants, and placing "Elephant" in the middle of a, let us say, six hundred year time frame i.e. from three hundred years before 1988 to 2288, three hundred after, and bearing in mind authoritative plausible scenarios for the habitability of the planet at that time.

What does this do? An initial impulse is that trying to read "Elephant" at this scale simply does not "make sense." It seems deliberately to repeat the kind of derangement of scale familiar in environmental slogans ("eat less meat and save the planet"). At the same time, the feeling of paralysis or arbitrariness in the experiment cannot override the conviction that

to read at scales that used, familiarly, to “make sense” may now also be a form of intellectual and ethical containment.

What, then, is being held off? Viewed on very long time scales, human history and culture can take on unfamiliar shapes, as work in environmental history repeatedly demonstrates, altering conceptions of what makes something “important” and what does not.⁴ Nonhuman entities take on a decisive agency. Thus some would argue that, globally, the two major events of the past three centuries have been the industrial exploitation of fossil fuels and a worldwide supplanting of local biota in favor of an imported portmanteau of profitable species: cattle, wheat, sheep, maize, sugar, coffee, eucalyptus, palm oil, etc. Thus it is that most of the world’s wheat, a crop originally from the middle east, now comes from other areas—Canada, the United States, Argentina, Australia—just as people of originally European descent now dominate a large proportion of the earth’s surface. This huge shift in human populations, including slaves as well as domesticated animals and plants, has largely determined the modern world, with its close connections between destructive monocultures in food production, exploitative systems of international trade and exchange and the institution of the modern state. At its bleakest, an ecological overview of the current state of the planet shows a huge bubble of population and consumption in one species intensifying exponentially and expanding at a rate that cannot be supported by the planet’s resources for long. It is the transitory world of this bizarre, destructive and temporary energy imbalance that Western populations currently inhabit and take for a stable and familiar reality.

One element of containment in lower scale readings of “Elephant,” blind to this bigger reality, is the “methodological nationalism” of readings located at the middle scale. “Methodological nationalism” is a term taken from A.D. Smith and used by Ulrich Beck: “While reality is becoming [or always was?] thoroughly cosmopolitan, our habits of thought and consciousness, like the well-worn paths of academic teaching and research, disguise the growing unreality of the world of nation-states” (21). That is, we often still think, interpret and judge as if the territorial bounds of the nation state acted as a self-evident principle of overall coherence and intelligibility within which a history and culture can be understood—ignoring anything that does not fit such a narrative. After

all, literary criticism itself evolved primarily as an institution of cultural self-definition at this scale. Almost all literary criticism of Carver could be instanced here. Even so seemingly innocent a phrase as Carver's "the dark side of Reagan's America" (qtd. in Nessel 4) may instantiate methodological nationalism in proportion to the degree in which the national sphere and its cultural agenda serve exclusively to enframe, contain, and shape an analysis or the familiar—but contained—judgments of social "inclusion" and "exclusion."

The expanded scale makes familiar critical assumptions about the adequacy of a national context look parochial, self-interested and damaging. What happens if one deploys at the third global scale the methodology of mainstream cultural criticism, with its broadly liberal, progressive agenda and questions of equity, those topoi of "inclusion" and "exclusion"? The rhetoric of marginalization and impoverishment common in readings of Carver becomes at the very least complicated by the fact, on a global scale, that while their distress is undeniable none of the characters in "Elephant" is actually poor in a material sense. The narrator has a house to himself and also a car. The supposedly impoverished brother had two cars and was forced to sell one of them to help keep his house. The supposedly poverty stricken daughter, with her husband and children, lives in a trailer but has at least one car. The brother's wife is a landowner and the son requires money to do something most living people will never do, travel in an airplane to another country. The mother does not live with any of her children but is maintained in a household of her own. It is not the number of people but the number of separate households demanding support that is the real economic issue in "Elephant," keeping the property each represents. The culture of independence affirmed in the narrator's indignant work-ethic also effectively serves economic and infrastructure systems that set up a continuous dependency on high levels of consumption and, as a result, produces a pervasive and intensifying sense of entrapment. "If nothing succeeds like success, nothing also entraps like success" (Jonas 9).

Derrida argued how the supposedly self-contained "inner" realm of the at home, the house, the personal household, is constitutively breached by its embeddedness in public space, yet his very set up repeated liberal conceptions of politics, even if it complicated them. At the third scale, how-

ever, everything and everyone is always “outside”: a person registers there less in terms of familiar social coordinates (race, class, gender and so on) than as a physical entity, representing so much consumption of resources and expenditure of waste (not the personality, but the “footprint”). Like a great deal of twentieth century literature (including, say, *On the Road*), the effect of embedding “Elephant” within the third scale is to turn the text into a peculiar kind of gothic, a doppelganger narrative. Characters as “persons” and responsible agents are now doubled by themselves as mere physical entities. The larger the scale the more thing-like becomes the significance of the person registered on it (even as scale effects have given human beings the status of a geological force). Plots, characters, setting and trivia that seemed normal and harmless on the personal or national scale reappear as destructive doubles of themselves on the third scale, part of a disturbing and encroaching parallel universe, whose malign reality it is becoming impossible to deny. It becomes impossible to sustain the fiction that significant historical agency is the preserve of human beings alone. The material infrastructure that surrounds and largely dictates the lives of the people, the houses, the cars, the roads, may partially displace more familiar issues of identity and cultural representation as a focus of significance. Technology and infrastructures emerge not only as inherently political but as unpredictably doubly politicized in scale effects that deride the intentions of their users or builders. “Elephant” could be described in terms of what William Ophuls calls “energy slavery,”⁵ the oppressive, all-pervading, and destructive effects of being born into a fossil fuel based infrastructure as aggressive as an occupying army. A futural reading of “Elephant” would thus be more object-centered, aware of the capricious nature of nonhuman agency and suspicious of the way contemporary criticism, even ecocriticism, tends to interiorize all environmental issues as ultimately questions of subjective attitudes or belief, of humanity acting reflexively upon itself (even “humanity destroying itself”). For instance, there is nothing really “private” about a car, just as, ironically, the average person’s decisions to fill or not fill a kettle will almost certainly be of more real consequence, however minuscule, than their political opinions ever will.⁶ Along with the households demanding to be sustained, the politics of energy slavery reappear even in such seeming daily trivia as how the daughter’s partner allegedly loses the chance of

a job because his car broke down, or the way the narrator's brother promises," I've got this job lined up. It's definite. I'll have to drive fifty miles round trip every day, but that's no problem—hell, no. I'd drive a hundred and fifty if I had too" (83). Cars also proliferate themselves through the parasitism of ideologies of individual "freedom"—"Elephant" ends with the narrator in the passenger seat, on a high of speed urging on George, complete with cigar, to drive as fast as he possibly can.

To highlight nonhuman agency adds a missing dimension to such familiar critical topoi, in reading Carver, as the erosion of communal values, or to the social/cultural force of Carver's so-called minimalism in short story technique, its projection of a late-capitalist society of disjunctive surfaces and personal isolation in which the lack of a completely reliable sense of relation between cause and effect, intention and result, effort and reward, is accompanied by a pervading sense of insecurity. The futural reading further decenters human agency, underlining the fragility and contingency of effective boundaries between public and private, objects and persons, the "innocent" and "guilty," human history and natural history, the traumatic and the banal, and (with technology) the convenient and the disenfranchising. In sum, at the third scale, a kind of non-anthropocentric irony deranges the short story as any easily assimilable object of any given kind of moral/political reading.

Simon Levin writes "That there is no single correct scale or level at which to describe a system does not mean that all scales serve equally well or that there are not scaling laws" (1953). However, there are crucial differences between reading a literary text at multiple scales and the function of scales in scientific modeling and explanation. In such modeling, suppression of detail is seen as strength of work at large scales, where broad patterns can emerge overriding individual variations. A literary reading clearly works in no such way. Assumptions of scale are always at work in any reading, but these may enable different judgments of value, not decide them. The three scales produce readings of "Elephant" that conflict with each other, yet can the third scale act as some final frame of reference or court of last appeal deciding for us how to read the text? An ecological overview is in danger of feeding a reductive but increasingly familiar green moralism, keen to turn ecological facts into moral imperatives on how to live, blind to the sense of helplessness dominant in "El-

elephant” at the first scale. While it highlights the hidden costs of lower scale thinking, the third scale’s tendency to register a person primarily as a physical thing is evidently problematic, almost too brutally removed from the daily interpersonal ethics, hopes and struggles that it ironizes. For instance, although this essay chose the less controversial example of cars, the most environmentally significant aspect of the situation projected by the text would be the reproduction of people themselves. The fact that the narrator has fathered two children would be more crucial—in the brutal terms of physical emissions—than either his lifestyle or property. This highlights an issue, overpopulation, which reduces even Donna Haraway to contradiction—or, more strictly, to thinking on conflicting scales at the same time—when she says in an interview “as a biologist,” “in the face of a planet that’s got well over 6 billion people now”:

the carrying capacity of the planet probably isn’t that. And I don’t care how many times you talk about the regressive nature of anti-natalist ideologies and population control ideologies. All true, but without serious population reduction we aren’t going to make it as a species, and neither are thousands or millions of other species....So you can hate the Chinese for the one-child policy and also think they are right (*laughs*).
(qtd. in Schneider 153)

In sum, reading at several scales at once cannot be just the abolition of one scale in the greater claim of another but a way of enriching, singularizing and yet also creatively deranging the text through embedding it in multiple and even contradictory frames at the same time (so that even the most enlightened seeming progressive social argument may have one in agreement on one scale and reaching for a conceptual brick on another). The overall interpretation of “Elephant” offered here can only be a multiple, self-conflictual one. The acts of the narrator remain ones of great personal generosity even if, at the same time, scale effects ironically implicate them in incalculable evil. The text emerges, simultaneously, depending on the scale at issue, as (1) a wry anecdote of personal heroism, (2) a protest against social exclusion, and (3) a confrontation with the entrapment of human actions and decisions within a disastrous imper-

sonal dynamic they do not comprehend, as well as the various containments of inherited modes of thinking.

A further conclusion seems clear. Thinking of climate change in relation to literary or cultural criticism will not be a matter of inventing some new method of reading per se, for its most prominent effect is of a derangement of scales that is also an implosion of intellectual competences. It is far easier for critics to stay inside the professionally familiar circle of cultural representations, ideas, ideals and prejudices, than to engage with long-term relations of physical cause and effect, or the environmental costs of an infrastructure, questions that involve nonhuman agency and which engage modes of expertise that may lie outside the humanities as currently constituted. This would also suggest that the humanities as currently constituted make up forms of ideological containment that now need to change.

Notes

1. This does not exclude that deceptive fix, the electric car. Most of the polluting emissions associated with any car come from the process of its manufacture. The electricity that powers a supposedly eco-friendly car would need to have been generated somewhere.
2. Brown contrasts the alternative notion of democracy as the difficult challenge of genuinely sharing power to the liberal conception of delegated power as supposedly forming the outward-facing barrier behind which individual “freedom” is lived out. Vincent B. Leitch, querying the absence of any communitarian element in Derrida’s political thinking, finds “a long rightward-leaning libertarian shadow [cast] over Derrida’s left-wing democratic politics” (242).
3. I go into more detail on this in the chapter “Freedoms and the Institutional Americanism of Literary Study,” in my *The Poetics of Singularity: The Counter-Culturalist Turn in Heidegger, Derrida, Blanchot and the Later Gadamer* 11–31.
4. See, for instance, Ponting, Crosby, Chew, and Diamond.
5. See Ophuls 169–74.
6. Michael Northcott writes: “The ascription ‘private’ is increasingly problematic when applied to automobiles. Their use requires the public maintenance of an extensive concrete, steel and tarmac infrastructure, representing one half of the built space of European and American cities” (215–6).

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